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**HELLENIC REPUBLIC**  
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**DEVELOPMENT AND INVESTMENTS**

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**OPERATIONAL PROGRAM**  
**COMPETITIVENESS,**  
**ENTREPRENEURSHIP AND**  
**INNOVATION**

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## **SANITURA (TARGET IDENTIFICATION AND DEVELOPMENT OF NOVEL APPROACHES FOR HEALTH AND ENVIRONMENTAL APPLICATIONS)**

SANITURA (MIS 5002514) is implemented under the Action for the Strategic Development on the Research and Technological Sectors, funded by the Operational Programme "Competitiveness, Entrepreneurship and Innovation" (NSRF 2014-2020) and co-financed by Greece and the European Union (European Regional Development Fund). Aim of the project is the support of IBA research activities falling into the National Research and Innovation Strategies (RIS), such as the delineation of disease mechanisms, the identification of biomarkers and novel treatment targets, the development of preclinical disease models, the discovery of bioactive molecules and natural products for pharmaceutical and cosmetic applications, and the design of technologies for suppressing the environmental footprint of the agro-food sector. SANITURA supports also the education of a considerable number of young scientists, reducing the brain-drain. The results of the research activities of SANITURA are being presented both to the scientific community and to the public.

Publications:

The following publications from IBA have been supported up to now by SANITURA:

1. [ApoE isoforms and carboxyl-terminal-truncated apoE4 forms affect neuronal BACE1 levels and A \$\beta\$  production independently of their cholesterol efflux capacity](#) .

Dafnis I, Raftopoulou C, Mountaki C, Megalou E, Zannis VI, Chroni A.

Biochem J. 2018 May 31;475(10):1839-1859.

1. [A New Perspective in Utilizing MMP-9 as a Therapeutic Target for Alzheimer's Disease and Type 2 Diabetes Mellitus](#) .

Kaminari A, Tsilibary EC, Tzinia A.

J Alzheimers Dis. 2018;64(1):1-16.

1. [On the Evolution of Specificity in Members of the Yeast Amino Acid Transporter Family as Parts of Specific Metabolic Pathways.](#)

Gournas C, Athanasopoulos A, Sophianopoulou V.

Int J Mol Sci. 2018 May 8;19(5). pii: E1398.

1. [Defense mechanisms against viral infection in Drosophila: RNAi and non-RNAi.](#)

Swevers L, Liu J, Smagghe G.

Viruses. 2018 May 1;10(5). pii: E230.

1. [Engineered Flock House Virus for Targeted Gene Suppression Through RNAi in Fruit Flies \(\*Drosophila melanogaster\*\) in Vitro and in Vivo.](#)

Taning CNT, Christiaens O, Li X, Swevers L, Casteels H, Maes M, Smagghe G.

Front Physiol. 2018 Jul 3;9:805.

1. [Insights on the alteration of functionality of a tyrosine kinase 2 variant: a molecular dynamics study.](#)

Lesgidou N, Eliopoulos E, Goulielmos GN, Vlasi M.

Bioinformatics. 2018 Sep 1;34(17):i781-i786.

1. [Amyloid-peptide  \$\beta\$  42 Enhances the Oligomerization and Neurotoxicity of apoE4: The C-terminal Residues Leu279, Lys282 and Gln284 Modulate the Structural and Functional Properties of apoE4.](#)

Dafnis I, Argyri L, Chroni A.

Neuroscience. 2018 Dec 1;394:144-155.

1. [Beyond Baculoviruses: Additional Biotechnological Platforms Based on Insect RNA Viruses](#)

Zhao Y, Sun J, Labropoulou V, Swevers L.

Adv Insect Physiol. 2018;55:123–162.

1. [Transcriptional response of immune-related genes after endogenous expression of VP1 and exogenous exposure to VP1-based VLPs and CPV virions in lepidopteran cell lines](#)

Zhao Y, Kolliopoulou A, Ren F, Lu Q, Labropoulou V, Swevers L, Sun J.

Mol Genet Genomics. 2019 Aug; 294(4):887-899.

10. [Short-term Persistence Precedes Pathogenic Infection: Infection Kinetics of Cricket Paralysis Virus in Silkworm-Derived Bm5 Cells](#)

Wang L, Cappelle K, Santos D, Vanden Broeck J, Smagghe G, Swevers L.

J Insect Physiol. 2019;115:1–11.

11. [PIWI pathway against viruses in insects](#)

Kolliopoulou A, Santos D, Taning CNT, Wynant N, Van den Broeck J, Smagghe G, Swevers L.

Wiley Interdiscip Rev RNA. 2019;10(6):e1555.

12. [The Future of Apolipoprotein E Mimetic Peptides in the Prevention of Cardiovascular Disease](#)

Valanti EK, Chroni A, Sanoudou D.

Curr Opin Lipidol. 2019;30(4):326–341.

13. [The role of senescence in cancer development](#)

Mavrogonatou E, Pratsinis H, Kletsas D.

Semin Cancer Biol. 2019;S1044-579X(19)30127-0.